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A. General

Papers submitted (in duplicate please) for publication may be written in English, French or German. A **summary** for Zentralblatt für Mathematik (including key words for classification) should be attached.

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Please give on the first page of the manuscript a **running head** (condensed title), which should not exceed 70 letters including spaces.

References to the literature should be listed at the end of the manuscript. The following information should be provided for **journal articles:** names and initials of all authors, full title of the paper, name of the journal, volume, first and last page numbers and year of publication. References to **books** should include name(s) of author(s), full title, edition, place of publication, publisher and year of publication.

Examples

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The words *"Proof", "Remark", "Example", "Case"* etc. are printed in italics, and "Definition" in boldface with the formulation in ordinary typeface.

2. Formulae

Letters in formulae are normally printed in italics, figures in ordinary typeface.
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Underlining for special alphabets and typefaces should be done according to the following code:

single underlining:	small letter
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yellow:	upright (abbreviations e.g. Re, Im, log, sin, ord, id, lim, sup, etc.)
red:	Greek
blue:	Gothic
green:	Script
violet:	the numerals 1 and 0 (to distinguish them from the small letter *l* and the capital letter *O*)

The following are frequently confused:

$\circ, o, O, 0$; $\cup, \mathbf{u}, \bigcup, U$; $\times, x, X, \kappa$; $\vee, v, \nu$; $\theta, \Theta, \phi, \varphi, \Phi, \varnothing$; ψ, Ψ; ε, ϵ;

a', a^1; the symbol *a* and the indefinite article a;

also the handwritten Roman letters:

c, C; e, l; I, J; k, K; o, O; p, P; s, S; u, U; v, V; w, W; x, X; z, Z;

Please take care to distinguish them in some way.

C. Examples

1. Special alphabets or typefaces

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	$\mathscr{a}, \mathscr{b}, \mathscr{c}, \mathscr{d}, \mathscr{e}, \mathscr{f}, \mathscr{g}, \mathscr{h}, \mathscr{i}, \mathscr{j}, \mathscr{k}, \mathscr{l}, \mathscr{m}, \mathscr{n}, \mathscr{o}, \mathscr{p}, \mathscr{q}, \mathscr{r}, \mathscr{s}, \mathscr{t}, \mathscr{u}, \mathscr{v}, \mathscr{w}, \mathscr{x}, \mathscr{y}, \mathscr{z}$
Sanserif	A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z
	a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z
Gothic	$\mathfrak{A}, \mathfrak{B}, \mathfrak{C}, \mathfrak{D}, \mathfrak{E}, \mathfrak{F}, \mathfrak{G}, \mathfrak{H}, \mathfrak{I}, \mathfrak{J}, \mathfrak{K}, \mathfrak{L}, \mathfrak{M}, \mathfrak{N}, \mathfrak{O}, \mathfrak{P}, \mathfrak{Q}, \mathfrak{R}, \mathfrak{S}, \mathfrak{T}, \mathfrak{U}, \mathfrak{V}, \mathfrak{W}, \mathfrak{X}, \mathfrak{Y}, \mathfrak{Z}$
	$\mathfrak{a}, \mathfrak{b}, \mathfrak{c}, \mathfrak{d}, \mathfrak{e}, \mathfrak{f}, \mathfrak{g}, \mathfrak{h}, \mathfrak{i}, \mathfrak{j}, \mathfrak{k}, \mathfrak{l}, \mathfrak{m}, \mathfrak{n}, \mathfrak{o}, \mathfrak{p}, \mathfrak{q}, \mathfrak{r}, \mathfrak{s}, \mathfrak{t}, \mathfrak{u}, \mathfrak{v}, \mathfrak{w}, \mathfrak{x}, \mathfrak{y}, \mathfrak{z}$
Boldface	**A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z**
	a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z
Special Roman	$\mathbb{A}, \mathbb{B}, \mathbb{C}, \mathbb{D}, \mathbb{E}, \mathbb{F}, \mathbb{G}, \mathbb{H}, \mathbb{I}, \mathbb{J}, \mathbb{K}, \mathbb{L}, \mathbb{M}, \mathbb{N}, \mathbb{O}, \mathbb{P}, \mathbb{Q}, \mathbb{R}, \mathbb{S}, \mathbb{T}, \mathbb{U}, \mathbb{V}, \mathbb{W}, \mathbb{X}, \mathbb{Y}, \mathbb{Z}, \mathbb{1}$
Greek	$\Gamma, \Delta, \Theta, \Lambda, \Xi, \Pi, \Sigma, \Phi, \Psi, \Omega$
	$\alpha, \beta, \gamma, \delta, \varepsilon, \zeta, \eta, \theta, \vartheta, \iota, \kappa, \lambda, \mu, \nu, \xi, o, \pi, \rho, \sigma, \tau, \upsilon, \varphi, \phi, \chi, \psi, \omega$
Greek Sanserif	A, B, Γ, Δ, E, Z, H, Θ, I, K, Λ, M, N, Ξ, O, Π, P, Σ, T, Y, Φ, X, Ψ, Ω
	α, β, γ, δ, ε, ζ, η, ϑ, θ, ι, κ, λ, μ, ν, ξ, o, π, ρ, σ, ς, τ, υ, φ, χ, ψ, ω

(Indices and superscripts are not available)

2. Notations

preferred form	instead of
$A^*, b^\sim, \gamma', \mathfrak{v}, \mathbf{v}$	$\hat{A}, \tilde{b}, \bar{\gamma}, \hat{v}$
lim sup, proj lim	$\overline{\lim}, \underline{\lim}$
$f: A \to B$	$A \xrightarrow{f} B$
$\sum_{n=1}^{\infty}$	$\sum\limits_{n=1}^{\infty}$

preferred form	instead of
$\exp(-(x^2+y^2)/a^2)$	$e^{-\frac{x^2+y^2}{a^2}}$
$\dfrac{\cos(1/x)}{(a+b/x)^{1/2}}$	$\dfrac{\cos\frac{1}{x}}{\sqrt{a+\frac{b}{x}}}$

Die Grundlehren der mathematischen Wissenschaften Band 190

Carl Faith

Algebra: Rings, Modules and Categories I

By **Carl Faith,**
Rutgers University,
New Brunswick, N.J., USA
XXIII, 565 pages. 1973
Cloth DM 54,–
ISBN 3-540-05551-7

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This book is designed to introduce students to the basic ideas and operations of rings, modules, and categories and to bring them to the frontiers of research as rapidly as possible. The reader is forewarned not to be deceived by the elementary beginning, including a foreword on set theory and a first chapter on rudimentary group theory and category theory. There are more than 500 exercises.

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